What is claimed is:

. t r

- A control unit featuring clocked data transmission between a processor (μC) and at least one further circuit (ASIC 1, 2, n), the processor (μC) outputting a clock pulse (SCKr),
 wherein the processor (μC) is configured in such a manner that the processor (μC) monitors the clock pulse (SCKr) based on output signals of at least two clock outputs (10, 11).
- 2. The control unit as recited in Claim 1, wherein the at least two clock outputs (10, 11) are connected in such a manner that the control unit generates a monitoring signal as a function of the output signals.
- 3. The control unit as recited in Claim 2, wherein an exclusive-OR element (12) is provided to which the output signals are supplied, respectively; the monitoring signal being generated as a function of a signal of the exclusive-OR element (12).
- 4. The control unit as recited in Claim 1, wherein the at least two clock outputs (10, 11) are connected in such a manner that the output signals are fed back respectively to a first and a second input (13, 14) of the processor (μC) in order for the processor (μC) to monitor the output signals and to generate the monitoring signal as a function thereof.
- 5. The control unit as recited in Claim 1, wherein the at least two clock outputs (10, 11) are connected in such a manner that the clock pulse (SCKr) is generated as a function of the output signals.

5

NY01 1103529 v1

- 6. The control unit as recited in Claim 5, wherein the at least two clock outputs (10, 11) are ORed together to generate the clock pulse.
- 7. The control unit as recited in Claim 6, wherein for ORing the at least two clock outputs (10, 11), a diode (D1, D2) or an OR gate are provided, respectively.
- 8. The control unit as recited in Claim 6 or 7, wherein the clock pulse (SCKr) are supplied to an impedance transformer and/or an amplifier (V).
- 9. The control unit as recited in one of the preceding claims, wherein the clock outputs (10, 11) are assigned to different port groups.
- 10. The control unit as recited in one of the Claims 4 through 9, wherein the first and second inputs (13, 14) are assigned to different port groups.

6

NY01 1103529 v1